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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/700,400	11/04/2003		Peter A. Quigley	FPY-048.04	5827	
25181	7590	07/15/2005		EXAMINER		
FOLEY H			COLE, ELIZABETH M			
PATENT G	ROUP. W	ORLD TRADE				
155 SEAPO			ART UNIT	PAPER NUMBER		
BOSTON,	MA 021	10		1771		

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)					
	10/700,400	QUIGLEY ET AL.					
Office Action Summary	Examiner	Art Unit					
	Elizabeth M. Cole	1771					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)☐ Responsive to communication(s) filed on							
2a) ☐ This action is FINAL . 2b) ☒ This action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-62</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>1-49</u> is/are allowed.							
6)⊠ Claim(s) <u>50-62</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
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Attachment(s)							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date	6) Other:	, , , , , , , , , , , , , , , , , , ,					
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office A	Action Summary	Part of Paper No./Mail Date 071205					

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1. The finality of the previous action is withdrawn.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 50-53, 57, 58, The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

62 are rejected under 35 U.S.C. 102(b) as being anticipated by Charboneau, U.S. Patent No. 5,551,484. Charboneau discloses a tubular liner comprising an external jacket, an interior liner and a woven intermediate layer. A capacitance leak detecting circuit can be included in the liner. An optical fiber can be woven into the woven intermediate layer whereby stress in the liner and pipe would induce microbending the optical fiber which could be monitored. The stress detectors can be connected to the optical fiber. A conductive layer can be interposed between the exterior jacket and the non-conductive woven intermediate layer, and a leak detector can be connected to the conductive layer and the conductive element which can would then measure changes in electrostatic capacity. See col. 2, line 30- col. 3, line 10.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 50-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charboneau, U.S. Patent No. 5,551,484 in view of Savic, U.S. Patent No. 5,416,724. Charboneau discloses a liner as set forth above. While Charboneau discloses employing sensors to monitor leaks, Charboneau differs from the claimed invention because it does not disclose all of the particularly claimed types of sensors. Savic teaches at col. 1, lines 28-55 teaches that pressure, acoustic, volume balance and temperature changes can be monitored in pipelines via sensors. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed additional sensors to measure pressure changes, acoustic changes, volume balance changes and temperature changes as set forth in Savic in the pipeline of Charboneau, motivated by the expectation that the use of the additional types of sensors would have improved the safety of the pipeline.
- 5. Claims 50-62 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 65-87 of copending Application No. 10/134,971 in view of Charboneau, U.S. Patent No. 10/134,972. US '971 discloses an internal lining tube comprising a substantially fluid impervious inner layer, a permeation barrier and a composite layer which is exterior to the internal liner layer. US '971 differs from the claimed invention because US '971 does

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not teach incorporating sensors into the lining. Charboneau teaches incorporating sensors into pipe linings as set forth above in order to monitor the pipeline for possible problems and enhance the safety of the pipeline. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a sensor into the pipe lining of '971 in order to enable the monitoring of the pipeline and detect potential problems in order to make the pipe lining of '971 more safe.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

- 6. The terminal disclaimer filed on 6/28/05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 6016845 and 6148866 has been reviewed and is accepted. The terminal disclaimer has been recorded.
- 7. Claims 1-49 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

Elizabeth M. Cole Primary Examiner Art Unit 1771 Page 5

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